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REMARKS

Claims 20-31 and 33-36 were pending in the instant application. In the February 7, 2003 Advisory Action, the Examiner maintained the rejection of claims 20-26 under 35 U.S.C. § 112, first paragraph, set forth in the May 21, 2002 Final Office Action. The Examiner maintained the objection to claims 27-31 and 33-36 as being dependent on a rejected base claim (claim 20), but indicated that these claims would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. The Examiner further stated that the specification is enabling for use of the specific conopeptides PnVIIA and TxVIIA as agonists of neuronal pacemaker cation channels.

By this Amendment, Applicants have canceled claims 21-26 without prejudice to their right to file a continuation or divisional application. The canceled claims represent all subject matter rejected by the Examiner in the May 21, 2002 Final Office Action. Applicants have amended claim 20 to recite only subject matter that the Examiner has deemed to be allowable. Accordingly, Applicants respectfully request that the Examiner enter and consider this Amendment. Upon entry of the present amendment, claims 20, 27-31, and 33-36 will be pending and under examination. All pending claims will then contain only subject matter deemed to be allowable by the Examiner.

In view of the above remarks and amendments, it is believed that the claims satisfy the requirements of the patent statutes and fully address the Examiner's concerns as set forth in the Final Office Action of May 21, 2002 and maintained in the February 7, 2003 Advisory Action. Reconsideration of the instant application and early notice of allowance are requested. The Examiner is invited to telephone the undersigned if it is deemed to expedite allowance of the application.

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RESPECTFULLY SUBMITTED,

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SIGNATURE		DATE	March 21, 2003

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Attachments: Marked up copies of amended claims

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Marked-up copy of amended claim

20 (Twice amended). A substantially pure conopeptide selected from the group consisting of:

- (a) PnVIIA: Asp-Cys-Thr-Ser-Xaa₁-Phe-Gly-Arg-Cys-Thr-Val-Asn-Ser-Xaa₂-Cys-Cys-Ser-Asn-Ser-Cys-Asp-Gln-Thr-Tyr-Cys-Xaa₂-Leu-Tyr-Ala-Phe-Xaa₃-Ser (SEQ ID NO:6) wherein Xaa₁ is Trp, Xaa₂ is γ-Glu, Xaa₃ is Hyp and the C-terminus has a free carboxyl group;
- (b) Tx6.4: Xaa₁-Leu-Xaa₂-Cys-Ser-Val-Xaa₁-Phe-Ser-His-Cys-Thr-Lys-Asp-Ser-Xaa₂-Cys-Cys-Ser-Asn-Ser-Cys-Asp-Gln-Thr-Tyr-Cys-Thr-Leu-Met-Xaa₃-Xaa₃-Asp-Xaa₁ (SEQ ID NO:7) wherein Xaa₁ is Trp, Xaa₂ is γ-Glu, Xaa₃ is Hyp and the C-terminus has a free carboxyl group;
- (c) Tx6.9: Xaa₁-Xaa₂-Arg-Xaa₃-Gly-Gly-Cys-Met-Ala-Xaa₁-Phe-Gly-Leu-Cys-Ser-Arg-Asp-Ser-Xaa₂-Cys-Cys-Ser-Asn-Ser-Cys-Asp-Val-Thr-Arg-Cys-Xaa₃-Leu-Met-Xaa₃-Phe-Xaa₃-Xaa₃-Asp-Xaa₁ (SEQ ID NO:8) wherein Xaa₁ is Trp, Xaa₂ is γ-Glu, Xaa₃ is Hyp and the C-terminus has a free carboxyl group;
- (d) Tx6.6: Asp-Xaa₁-Xaa₂-Asp-Asp-Gly-Cys-Ser-Val-Xaa₁-Gly-Xaa₃-Cys-Thr-Val-Asn-Ala-Xaa₂-Cys-Cys-Ser-Gly-Asp-Cys-His-Xaa₂-Thr-Cys-Ile-Phe-Gly-Xaa₁-Xaa₂-Val (SEQ ID NO:10) wherein Xaa₁ is Trp, Xaa₂ is γ-Glu, Xaa₃ is Hyp and the C-terminus has a free carboxyl group;
- (e) Tx6.5: Gly-Met-Xaa₁-Gly-Xaa₂-Cys-Lys-Asp-Gly-Leu-Thr-Thr-Cys-Leu-Ala-Xaa₃-Ser-Xaa₂-Cys-Cys-Ser-Xaa₂-Asp-Cys-Xaa₂-Gly-Ser-Cys-Thr-Met-Xaa₁ (SEQ ID NO:11) wherein Xaa₁ is Trp, Xaa₂ is γ-Glu, Xaa₃ is Hyp and the C-terminus has a free carboxyl group;
- (f) Gm6.7: Xaa₂-Cys-Arg-Ala-Xaa₁-Tyr-Ala-Xaa₃-Cys-Ser-Xaa₃-Gly-Ala-Gln-Cys-Cys-Ser-Leu-Leu-Met-Cys-Ser-Lys-Ala-Thr-Ser-Arg-Cys-Ile-Leu-Ala-Leu (SEQ ID NO:12) wherein Xaa₁ is Trp, Xaa₂ is γ-Glu, Xaa₃ is Hyp and the C-terminus has a free carboxyl group;
- (g) Mr6.1: Asn-Gly-Gln-Cys-Xaa₂-Asp-Val-Xaa₁-Met-Xaa₃-Cys-Thr-Ser-Asn-Xaa₁-

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Xaa₂-Cys-Cys-Ser-Leu-Asp-Cys-Xaa₂-Met-Tyr-Cys-Thr-Gln-Ile (SEQ ID NO:13) wherein Xaa₁ is Trp, Xaa₂ is γ-Glu, Xaa₃ is Hyp and the C-terminus is amidated;

(h) Mr6.2: Cys-Gly-Gly-Xaa₁-Ser-Thr-Tyr-Cys-Xaa₂-Val-Asp-Xaa₂-Xaa₂-Cys-Cys-Ser-Xaa₂-Ser-Cys-Val-Arg-Ser-Tyr-Cys-Thr-Leu-Phe (SEQ ID NO:14) wherein Xaa₁ is Trp, Xaa₂ is γ-Glu and the C-terminus is amidated; and

(i)Mr6.3: Asn-Gly-Gly-Cys-Lys-Ala-Thr-Xaa₁-Met-Ser-Cys-Ser-Ser-Gly-Xaa₁-Xaa₂-Cys-Cys-Ser-Met-Ser-Cys-Asp-Met-Try-Cys (SEQ ID NO:15) wherein Xaa₁ is Trp, Xaa₂ is γ-Glu and the C-terminus is amidated[,

wherein Xaa₁ is Trp or 6-bromo-Trp; Xaa₂ is Glu or γ-carboxyglutamic acid (γ-Glu); and Xaa₃ is Pro or hydroxy-Pro (Hyp)].

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